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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/001,573	11/02/2001	Michael H. Zimmerman	60 SD 00806	2732
21269	7590	11/03/2004		
PEPPER HAMILTON LLP ONE MELLON CENTER, 50TH FLOOR 500 GRANT STREET PITTSBURGH, PA 15219			EXAMINER: LANGEL, WAYNE A	
			ART UNIT	PAPER NUMBER
			1754	

DATE MAILED: 11/03/2004

Please find below and/or attached an Office communication concerning this application or proceeding.



**UNITED STATES DEPARTMENT OF COMMERCE**  
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SERIAL NUMBER	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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10,001,573

EXAMINER
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ART UNIT	PAPER NUMBER
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DATE MAILED:

This is a communication from the examiner in charge of your application.  
COMMISSIONER OF PATENTS AND TRADEMARKS

☐ This application has been examined ☒ Responsive to communication filed on 10-13-04 ☒ This action is made final.

A shortened statutory period for response to this action is set to expire 3 month(s), — days from the date of this letter.  
Failure to respond within the period for response will cause the application to become abandoned. 35 U.S.C. 133

**Part I THE FOLLOWING ATTACHMENT(S) ARE PART OF THIS ACTION:**

- |   |   |
|---|---|
| 1. <input type="checkbox"/> Notice of References Cited by Examiner, PTO-892.        | 2. <input type="checkbox"/> Notice of Draftsman's Patent Drawing Review, PTO-948. |
| 3. <input type="checkbox"/> Notice of Art Cited by Applicant, PTO-1449.             | 4. <input type="checkbox"/> Notice of Informal Patent Application, PTO-152.       |
| 5. <input type="checkbox"/> Information on How to Effect Drawing Changes, PTO-1474. | 6. <input type="checkbox"/> _____   |

**Part II SUMMARY OF ACTION**

1. ☒ Claims 1, 2, 9, 11, 15, 23, 26 and 28 are pending in the application.

Of the above, claims \_\_\_\_\_ are withdrawn from consideration.

2. ☐ Claims \_\_\_\_\_ have been cancelled.

3. ☐ Claims \_\_\_\_\_ are allowed.

4. ☒ Claims 1, 2, 9, 11, 15, 23, 26 and 28 are rejected.

5. ☐ Claims \_\_\_\_\_ are objected to.

6. ☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

7. ☐ This application has been filed with informal drawings under 37 C.F.R. 1.85 which are acceptable for examination purposes.

8. ☐ Formal drawings are required in response to this Office action.

9. ☐ The corrected or substitute drawings have been received on \_\_\_\_\_. Under 37 C.F.R. 1.84 these drawings are ☐ acceptable; ☐ not acceptable (see explanation or Notice of Draftsman's Patent Drawing Review, PTO-948).

10. ☐ The proposed additional or substitute sheet(s) of drawings, filed on \_\_\_\_\_, has (have) been ☐ approved by the examiner; ☐ disapproved by the examiner (see explanation).

11. ☐ The proposed drawing correction, filed \_\_\_\_\_, has been ☐ approved; ☐ disapproved (see explanation).

12. ☐ Acknowledgement is made of the claim for priority under 35 U.S.C. 119. The certified copy has ☐ been received ☐ not been received ☐ been filed in parent application, serial no. \_\_\_\_\_; filed on \_\_\_\_\_.

13. ☐ Since this application appears to be in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11; 453 O.G. 213.

14. ☐ Other

**EXAMINER'S ACTION**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 2, 9, 11, 15, 23, 26 and 28 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over French 2686101, for the reasons given in the Final Rejection. Applicant's argument, that the French Patent does not disclose the presently claimed percentage of reactants, catalyst and oxygen getter, is not convincing. The French Patent teaches on page 2, lines 38 and 39 that the ratio of boron nitride to catalyst (including the additive) is 1:20, and further discloses on page 3, lines 1 and 2 that the proportion of the additive to the alkali metal nitride or alkaline earth metal nitride catalyst is 0.05 to 1, which proportions would be equivalent to or at least suggest an amount of getter of between about 0.005 and 0.5 wt. %, as recited in applicant's claims. Applicant's argument, that the additive of the French Patent is added to the catalyst and is linked to reaction yield, and that it is nowhere disclosed, suggested or implied that the additive of the French Patent is an oxygen getter in the amount of 0.005 to 0.5 wt.% which is crucial for the resulting CBN product to have low oxygen content and improved toughness, is not convincing. The

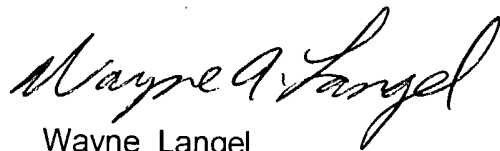
CBN formed according to the process of the French Patent would inherently have low oxygen content and improved toughness, since the process steps recited in applicant's claim 1 are fully disclosed in the French Patent at the aforementioned passages. See also the Examples. Applicant's argument, that one skilled in the art would only recognize that the presently claimed process would produce an improved toughness and low oxygen content CBN product from a reading of the present application, not from a reading of the French Patent, is not convincing, since this argument is legally irrelevant to rebut a rejection based on inherency. It is irrelevant as to where one skilled in the art would derive the information necessary to appreciate that the invention is inherent in the prior art. It is only necessary that the prior art fairly disclose or suggest doing what applicant has done. Applicant's argument, that to establish inherency, the extrinsic evidence must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, is not convincing, since it is clear from the evidence, including applicant's specification, that the CBN formed according to the French Patent would have improved toughness and an oxygen content of less than about 300 ppm. Applicant has not explained why the CBN formed according to the process of the French Patent would not have improve toughness and an oxygen content of less than about 300 ppm.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Wayne Langel at telephone number 571-272-1353.

A handwritten signature in black ink that reads "Wayne A. Langel". The signature is written in a cursive, flowing style.

Wayne Langel  
Primary Examiner  
Art Unit 1754